

ABSTRACT OF THE DISCLOSURE

A safety net system called Pan-barrier is invented to stop rockfall, debris flows, or the like, with three striking advantages: completely maintenance-free, highly efficient in dissipating and diverting kinetic energy, and very fast in installation. The Pan-barrier uses a new type of cable braking—the weight braking—that can be engaged repeatedly without limits or maintenance. The Pan-barrier consists of: 1) a sheet formed by one looped peripheral cable with mesh or net panels attached; 2) two or more anchors holding one side of the sheet close to the ground; and 3) two or more supporting cables (tiebacks), each tied to a ground anchor, erected by a post, and equipped with the weight braking system, holding the top side of the sheet at a designed height, so that the sheet is oblique to the ground. Impact objects are stopped inside the wedge formed between the oblique sheet and the ground.